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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,890	02/27/2002	Narayanan Venkitaraman	CM05034H	2114
24273	7590	11/29/2007		
MOTOROLA, INC INTELLECTUAL PROPERTY SECTION LAW DEPT 8000 WEST SUNRISE BLVD FT LAUDERDAL, FL 33322			EXAMINER HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2616	
			MAIL DATE	DELIVERY MODE
			11/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/083,890

Applicant(s)

VENKITARAMAN ET AL.

Examiner

Kevin Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 19, 20 and 24-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 19, 20 and 24-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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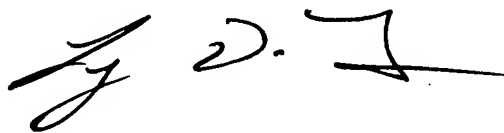
In view of the appeal brief filed on August 30, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.



LYNN FEILD
SUPERVISORY PATENT EXAMINER

Response to Arguments

Applicant's arguments filed August 30, 2007 have been fully considered but they are not persuasive. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

1. Applicant argued that Agrawal does not disclose maintaining a binding update while connected to a home network. However, in the process of roaming, Agrawal notes that a mobile unit maintains a binding list with correspondent nodes it is currently communicating with so that it may send binding updates when it roams to a new network (col. 3, lines 57-62).

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2. Applicant argued that Agrawal does not provide motivation to maintain a binding update list when at its home network. However, the mobile unit maintains a list for nodes it is currently communicating with (col. 3, lines 57-62), which allows less processing at the home agent (col. 3, lines 60-62). In view of the new rejection below using a KSR rationale and in view of Gwon, it would have been obvious to maintain the binding update list while in the home network.

3. Applicant argued that Agrawal in view of Sorenson and Malki does not provide maintaining a binding update list while in a home network. However, Agrawal provides a teaching and motivation for a mobile unit to maintain a binding update list while residing in its home network as noted in paragraph 1 above. Examiner notes that the claims do not require sending binding updates while in a home network, but only maintaining a binding update list while in the home network. As such, the rejection only uses the Malki reference to provide a teaching of sending a binding update when changing routers to a foreign network in the communication system.

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., sending binding updates while in a home network, or maintaining a binding update at a home network as argued regarding claim 41) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 41 is rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (specification, page 2, lines 25-29).

5. Applicant's admitted prior art discloses a method of operation of a mobile node within a communication system supporting mobile IP, wherein the mobile node is operable to connect to a network infrastructure (page 2, lines 25-29). The method comprises determining correspondent nodes that have received a binding update, where the determination is made prior to receiving any packets from the correspondent node (page 2, lines 27-29; note: prospectively corresponding), and sending a binding update to the correspondent nodes to inform the correspondent nodes of the new care-of-address (page 2, line 26).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 16, 19-20 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 6,992,995) in view of Gwon (US 2003/0016655), Sorensen (US 2002/0061009) and Lueng (US 6,959,341).

6. Regarding claims 16, 19-20 and 24-27, Agrawal discloses maintaining by a mobile node a binding update list of correspondent nodes for which the mobile node is communicating (col. 3, lines 57-62). The binding update includes care-of-address of the mobile node. However, Agrawal does not specifically disclose that the binding update list is maintained when at the home network of the mobile node. Although, Agrawal notes that the list is used to notify correspondent nodes when the location of the mobile node changes (col. 3, lines 57-62) and that the list is for current correspondent nodes. Therefore, it would have been obvious to one skilled

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in the art at the time the invention was made for a mobile node to maintain a binding update list at a home network in the invention of Agrawal because one skilled in the art would recognize the predictable result that a mobile node retaining a list of correspondent nodes while temporarily at the home network allows the mobile node to later notify the correspondent nodes when it again leaves the home network (col. 3, lines 57-62; Gwon, para. 54, lines 13-24; note: in Gwon the mobile node leaves the home network and sends a binding update to the correspondent nodes; see *KSR Int'l Co. v. Teleflex Inc.*, 2007).

7. Further, Agrawal does not disclose a mobile gateway router. Sorensen discloses an ad hoc mobile gateway router (fig. 2; para 24, lines 4-7). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have mobility for a mobile gateway router in the invention of Agrawal in order to provide movable network interfaces or gateways such as within a car, bus or airplane as is known in the art (Lueng, col. 3, lines 41-50).

Claims 28-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal in view of Gwon, Sorensen and Lueng as applied to claim 16 or 27 above, and further in view of Malki et al. (US 2001/0046223).

8. Regarding claims 30-39, Agrawal does not disclose detaching from the mobile gateway router, attaching to a second mobile gateway router and sending binding updates. Malki discloses choosing a new mobility point and sending binding updates (fig. 7, steps 710, 720 and 760) to correspondent nodes of a binding update list (para. 32, lines 18-19). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to self-register the mobility of a mobile node with a home agent in the invention of Agrawal in order to enhance mobility registration by controlling network messages by the mobile node (Malki, para. 54, last nine lines) and provide for free movement within a communications system (para. 4, lines 1-5).

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9. Regarding claims 28-29, and 40, Agrawal does not disclose generating a binding update in response to a tunneled packet or identifying a packet received from a correspondent node. However, Malki discloses a mobile node sending a binding update in response to a tunneled packet from a correspondent node or home agent of the mobile node (para. 50; fig. 10, steps 1010, 1020 and 1040) and identifying that a packet was received from a correspondent node without traversing the home agent (para. 50; fig. 10, steps 1010-1030). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to send a binding update in response to a tunneled packet or identify that a packet was received from a correspondent node without traversing the home agent in the invention of Agrawal in order to efficiently route packets to the mobile node (Malki, para. 50).

Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Agrawal et al. (US 6,992,995).

10. Regarding claims 42-43, Applicant's admitted prior art does not disclose maintaining a binding update list while in a home network. Agrawal discloses maintaining by a mobile node a binding update list of correspondent nodes for which the mobile node is communicating (col. 3, lines 57-62). The binding update includes care-of-address for the mobile node. However, Agrawal does not specifically disclose that the binding update list is maintained when at the home network of the mobile node. Although, Agrawal notes that the list is used to notify correspondent nodes when the location of the mobile node changes (col. 3, lines 57-62) and that the list is for current correspondent nodes. Therefore, it would have been obvious to one skilled in the art at the time the invention was made for a mobile node to maintain a binding update list at a home network in the invention of applicant's admitted prior art in order to provide location

changes to respective correspondent nodes when the mobile nodes leaves the home network (Agrawal, col. 3, lines 57-62).

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Agrawal et al. (US 6,992,995), as applied to claim 43 above, and in further view of Inoue et al. (US 2002/0191576).

11. Applicant's admitted prior art in view of Agrawal does not disclose a mobile gateway router or using a care-of-address of the router. Inoue discloses using the care-of-address of a mobile router (para. 26). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use a care-of-address of a mobile gateway router in the invention of applicant's admitted prior art in view of Agrawal in order to communicate with the mobile unite after it has roamed (Inoue, para. 26).

Conclusion

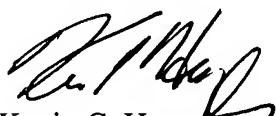
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET:

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at 571-272-2092. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin C. Harper

November 25, 2007